# Conceptual Operational Plan Alternative C - Dual Delta Conveyance

This alternative uses a comprehensive set of storage and conveyance facilities to efficiently move water through and around the Delta. New surface storage upstream and downstream of the Delta will provide greater flexibility in timing inflows to the Delta and diversions from the Delta. Downstream storage, in conjunction with groundwater/conjunctive, use will be used to better manage the timing of Delta exports. Improved conveyance through the Delta and isolated conveyance around the Delta further enhance the system flexibility while reducing diversion impacts on the fisheries.

# **Operational Assumptions**

- The water storage will be shared equally for flow releases to benefit the ecosystem and for the water supply. Water quality will receive benefit from the dilution effects of the released water.
- Real time monitoring will be used to shift diversion timing to better avoid fish entrainment. In general, export diversions would be reduced in the March through June period and increase in the late summer through fall.



Assume diversions above Hood will not be included in accounting for the Salinity Control Plan export ratios (allowed export of 35% Delta inflow from February through June and allowed export of 65% of Delta inflow from July through January). Some provisions will have to be made for meeting the X2 requirements and providing the spring flows which the export ratios help to support.

• Both the through Delta and the isolated conveyance are equipped with state of the art fish screens. However, some reduction in diversion in the spring will also help reduce fish entrainment.

#### Water Supply

## Average and Wetter Years

- New upstream surface storage (0.5 1.0 MAF) will be filled during high river flows by diverting a portion of the water from the receding leg of high flood hydrographs. This will allow the high flood peaks to continue in the river without significantly altering the channel maintenance benefits of the flood flows.
- Delta diversions will be reduced by about 200 TAF in the March through June period to reduce diversion effects on fisheries. This will amount to approximately 1000 cfs reduced diversion if spread evenly over the period or about 4000 cfs if concentrated on a critical

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month period. During average and wetter water years the reduced diversions will result in increased Delta outflow by a similar amount for this spring and early summer period. Water will be released from storage.

- All diversions less than the capacity (5000 7000 cfs) of the isolated conveyance facility
  will pass through that facility to deliver better quality water to the export pumps and to
  not interfere with in Delta fisheries.
- Diversions greater than the capacity of the isolated conveyance facility will be conveyed in the screened and improved through Delta channels.
- Water saved from demand management would be used for several purposes. A portion
  would be used to augment Delta outflow for the fishery. A portion would be exported to
  downstream of Delta surface and/or groundwater storage to augment water supplies. The
  remaining portion could remain in upstream surface storages, conveyed to groundwater
  storage, or used for consumptive demands.

## Dry and Critical Years

- Dry and critical year operation would be similar to that for the average and wetter years.
- There will be significantly reduced opportunity to fill either the upstream or downstream storage. Since flood events are generally much smaller and more infrequent during these years, the opportunity to divert water to the upstream reservoir will be significantly reduced. Detailed analyses of hydrologic and biological conditions will be required to set the criteria for filling the reservoir.
- The water saved would be used for two primary purposes. A portion would be used to augment Delta outflow for the fishery. The remaining portion would be used for consumptive demands.
- Conjunctive use programs and groundwater banking developed in the San Joaquin Valley would be used to offset the reduced export in the spring and to provide water supplies in the summer.

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